

REMARKS

By this amendment, claims 1 and 8-20 have been cancelled, claims 2-5 have been amended, and claims 21-36 have been added. Thus, claims 2-5 and 21-36 are now active in the application. Reexamination and reconsideration of the application is respectfully requested.

The specification and abstract have been carefully reviewed and revised to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attachment is captioned "Version with markings to show changes made."

At the top of page 2 of the Office Action, the drawings were objected to for failing to show the "engine compartment partition wall" as claimed in claims 8, 9, 19 and 20. In order to readily obviate this objection, claims 8, 9, 19 and 20 have been canceled, and the "engine compartment partition wall" is no longer claimed in any of the claims.

It is noted that a replacement formal drawing for Fig. 3 is submitted herewith under separate cover letter in order to provide a reference character 15 to designate the "circular opening" referred to on line 5 of page 8 of the original specification. Approval of this replacement formal drawing is respectfully requested, and it is also respectfully requested that the Examiner indicate the approval of the replacement formal drawing in the next Office Action.

Next, at the bottom of page 4 of the Office Action, the Examiner kindly indicated that claims 5-7 and 10-20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claim 5 has now been rewritten in independent form to include all of the limitations of the base claim 1 (there were no intervening claims), and claims 1 and 8-20 have been canceled. Claims 6 and 7 already depended from claim 5, and claims 2-4 have been amended to depend from claim 5. Therefore,

it is respectfully submitted that claims 2-7 are clearly allowable in view of the Examiner's indication of the allowable subject matter of claim 5.

Next, on pages 2-4 of the Office Action, claims 1 and 2 were rejected under 35 U.S.C. 102(e) as being anticipated by Perry et al. (U.S. 2003/0201096); claims 3, 8 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Perry et al. in view of Klingler et al. (U.S. 6,651,453); and claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Perry et al. in view of Kim et al. (U.S. 2004/0035140). These rejections are believed moot in view of the cancellation of claims 1 and 8-20, and are believed clearly inapplicable to the new claims 21-36, for the following reasons.

With exemplary reference to the drawing figures, claim 21 sets forth an air-conditioning system for a vehicle, the system comprising: a blower/evaporator housing case 2 including an upper recessed member 9 and a lower recessed member 10, the upper recessed member 9 being connected to the lower recessed member 10 along a parting line (see Figs. 1 and 3), the blower/evaporator housing case 2 including a scroll unit 6 and an evaporator housing unit 7; a rotary blower 13 housed in the scroll unit 6 of the blower/evaporator housing case 2 to create an air flow in a downstream direction, the rotary blower 13 having an intake port; an intake unit 4 mounted to the blower/evaporator housing case 2 and operably connected to the intake port of the rotary blower 13 to provide air intake into the rotary blower 13; an evaporator 18 housed in the evaporator housing unit 7 of the blower/evaporator housing case 2 downstream of the rotary blower 13 and connected to coolant inflow and outflow pipes 19; a cool air outlet port 48 formed in the blower/evaporator housing case 2 downstream of the evaporator 18; an air-conditioning unit 4 connected to the blower/evaporator housing case 2 at the cool air outlet port 48, the air-conditioning unit 5 having a heater core 86 for providing outlet temperature control and outlet mode control; wherein the blower/evaporator housing case 2 includes an air outlet portion 16, 46 connecting between the scroll unit 6 and the evaporator housing unit 7, the air outlet portion 16, 46 constituting an air flow channel defined between a pair of upright sidewalls; and wherein a bridge portion 34 (see Figs. 3 and 4) is provided to connect between the scroll unit 6 and the

evaporator housing unit 7, the bridge portion 34 being disposed outside the air flow channel of the air outlet portion 16, 46 to provide structural reinforcement of the air outlet portion 16, 46 of the blower/evaporator housing case 2.

In contrast to the present invention of claim 21, although the Perry et al. reference discloses an air conditioning system including a housing having a scroll unit housing a blower (fan f), an evaporator housing unit for housing an evaporator 1, and an air outlet portion connecting between the scroll unit and the evaporator housing unit and constituting an air flow channel defined between upright sidewalls, the Perry et al. air conditioning system does not include a bridge portion connecting between the scroll unit and the evaporator housing unit and disposed outside the air flow channel of the air outlet portion to provide structural reinforcement of the air outlet portion of the overall housing case. Rather, the design of the Perry et al. air conditioning system provides for insufficient rigidity of the housing case in the area between the scroll unit and the evaporator housing unit due to the structure of the air outlet portion providing for air flow from the scroll unit to the evaporator housing unit. In particular, in Perry et al., it is the air flow channel constituting the air outlet portion itself (i.e., without a bridge portion) that provides the structural support between the scroll unit and the evaporator housing unit.

On the other hand, as described at, for example, page 9, lines 12-25 of the present original specification, the bridge portion 34 of the present invention (see Figs. 3 and 4) provides structural reinforcement to the narrow outlet portion 16, 46 (the outlet portion 16 of the lower recessed member 10, and thus also the outlet portion 46 of the upper recessed member 9). In the preferred embodiment of the present invention, as best illustrated in Fig. 3, the bridge portion 34 is provided between the scroll-shaped lower case member 13 of the lower recessed member 10 and the lower locking portion 25b of the locking means 25. Since the locking means 25 secures the cooling pipes 19 to the evaporator housing unit 7 (formed of the evaporator housing upper and lower case members 47, 17), the bridge portion 34 thus connects between the scroll unit 6 and the evaporator housing 7 to provide structural reinforcement to the air outlet portion 16, 46.

The Examiner cited the Klinger et al. patent for teaching "the use of drain hole 28 in an air conditioning device for the purpose of draining the condensate", and cited the Kim et al. reference for teaching "for use of the location of the intake port and outlet port at the upper recess/upper cover in an air conditioner for the purpose of locating inlet and outlet of air." However, these publications provide no teaching or suggestion that would have obviated the above-discussed shortcoming of the Perry et al. patent.

Because of these distinctions between the present invention of claim 21 and the prior art references of record, it is believed clear that claim 21 is not anticipated by the prior art of record, and further that a person of ordinary skill in the art would not have been motivated to modify the Perry et al. reference or to make any combination of the references of record in such a manner as to result in or otherwise render obvious the present invention of claim 21. Therefore, it is respectfully submitted that claim 21, as well as claims 22-29 which depend therefrom, are clearly allowable over the prior art of record.

Next, new independent claim 30 has been drafted to include basically the features of original claim 1 and the allowable original claim 5, but with the claim language revised to be more similar to that set forth in independent claim 21. In addition, claim 30 does not specify either that the parting line is horizontal or that the intake air unit is for selecting a source from which air is taken into the intake port of the rotary blower, but these features are presented in dependent claims 31 and 32. In any event, the last two paragraphs of claim 30 set forth basically the features of the original allowable claim 5 by requiring the upper recessed member 9 and lower recessed member 10 to have respective edges thereof along the parting line, and that the edges respectively include joint portions 42a, 12a; and that a locking clamp device 25 is provided on the joint portions 42a, 12a to lock an expansion valve 23 to the blower/evaporator housing case 2.

Thus, in view of the indication of allowability of claim 5, and because this feature of present claim 30 is not taught or suggested by the references of record, it is respectfully

submitted that claim 30, as well as claims 31-36 which depend therefrom, are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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VEHICLES

SUBMISSION OF REPLACEMENT FORMAL DRAWING

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

A replacement formal drawing is submitted herewith for Fig. 3, in order to provide a new reference character 15 to designate the "circular opening" referred to at line 5 of page 8 of the original specification.

Approval of this replacement formal drawing is respectfully requested.

Respectfully submitted,

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